

LITTLE KNOWN NEW JERSEY FISHES.

BY HENRY W. FOWLER.

The following notes on rare or neglected fishes from New Jersey, are based on material now in the Academy, unless otherwise stated. I have also mentioned some others to show interesting associations.

Alopias vulpes (Gmelin).

One was reported taken off Atlantic City on May 14, said to have been 15 feet long. Not in the Academy.

Eulamia obscura (Le Sueur).

I examined the jaws of an example, now in the New Jersey State Museum and evidently this species, taken at Perth Amboy in 1850, submitted to me by Mr. S. R. Morse.

Squatina squatina (Linnaeus).

The first record of this fish is in 1847, from Delaware Bay,¹ and an old dried skin in the collection of the Academy, without data, is very likely the original specimen. It has also been recorded from Atlantic City.²

Dasyatis say (Le Sueur).

One taken at Barnegat in August by Mr. R. B. Farley proves to be this species.

Acipenser sturio Linnaeus.

A large example was taken, in a net, in the Delaware River at Beverly late in August. Not in the Academy.

Tarpon atlanticus (Valenciennes).

The first record for this species is by Baird, who says, in 1874, it has "been noted as occurring more or less frequently along the coast of New Jersey."³ An example, said to have weighed 120 pounds, was reported from Seabright later,⁴ and the same record says "several reported between Cape May and Fire Island in the past ten years."

¹ *Squatina dumerili*, in *Proc. Acad. Nat. Sci. Phila.*, 1847, p. 246.

² *Squatina angelus* Gaskill, *Forest and Stream*, XXXVI, August 13, 1891, p. 68.

³ *Megalops thrissoides* Baird, *Forest and Stream*, III, July 30, 1874, p. 338.

⁴ *Forest and Stream*, XXV, August 20, 1885, p. 70.

Other records⁵ refer to one taken in a pound at Stone Harbor said to have been 3½ feet long, and one in a net at Atlantic City about the same time, estimated to have weighed 100 pounds. Not in the Academy.

Albula vulpes (Linnæus).

Reported in the New York market, where it was said to have been brought from New Jersey.⁶ Not in the Academy.

Though the alewives are very abundant fishes, I have secured but few of *Pomolobus mediocris*, where I found a number at Seaside Park on July 28, 1909. I have a small example of *P. æstivalis* from Jersey City, taken in May, 1909, by Mr. T. D. Keim.

Leptocephalus conger (Linnæus).

A small example was taken at Ocean City during the past summer by Mr. D. McCadden.

Felichthys marinus (Mitchill).

In 1884 many were said to have been reported from the Mullica River.⁷ A "salt water catfish" is also reported by Hulit from Asbury Park.⁸ Not in the Academy.

Ameiurus natalis prosthistius (Cope).

Mr. J. F. Street secured an example in the Rancocas Creek at New Lisbon, in Burlington County, on September 11, which is the first instance of its occurrence in the Delaware River valley. He also found some very dark examples of *Abramis crysoleucas* at the same time, though they were not preserved.

Fundulus luciae (Baird).

Dr. R. J. Phillips and the writer found this species in some numbers in the salt ponds at Corson's Inlet, on April 3, associated with *F. heteroclitus macrolepidotus*, *Cyprinodon variegatus* and *Gasterosteus aculeatus*. They were usually found with the killies, though prawns and pury minnows were occasionally their only companions.

Lucania parva (Baird).

I found this little fish abundant with *F. heteroclitus macrolepidotus* at Manasquan Inlet on July 19, also associated with *Anguilla chrisypa*, *Cyprinodon variegatus* and *Menidia beryllina cerea*.

Gambusia gracilis Heckel.

I again found this species common in the streams about Cape May,

⁵ *Forest and Stream*, XLVII, July 11, 1896, p. 31.

⁶ *L. c.*, XI, October 10, 1878, p. 208.

⁷ *L. c.*, XXIV, August 14, 1884, p. 50.

⁸ *L. c.*, LI, August 27, 1898, p. 169.

such as Pond and New England Creeks, though only few were met with in Coxe's Hall Creek, on October 24, 1909. The latter is the most northern stream in which I have yet noted it. In Fishing Creek it was not found, though *Abramis crysoleucas*, *Umbra pygmaea*, *Aphredoderus sayanus*, *Enneacanthus obesus* and *Eupomotis gibbosus* were common.

Exocoëtus volitans Linnæus.

Dr. H. Tucker found 2 examples on the beach at Cape May City during the past August. Though these specimens were in bad condition and not preserved, Dr. Tucker is certain of their identity with Atlantic specimens in the collection.

Fistularia tabacaria Linnæus.

A small example was taken September 3, at Ocean City, by Mr. D. McCadden, with numbers of *Fundulus majalis*, *Menidia menidia notata*, *Mugil curema*, *Hippocampus hudsonius*, *Trachinotus carolinus*, *Orthopristis chrysopterus*, *Stenotomus chrysops*, *Menticirrhus saxatilis*, *Spheroides maculatus*, *Prionotus evolans strigatus* and *Opsanus tau*. *Seriola zonata*, *Tautoglabrus adspersus*, *Tautoga onitis*, *Paralichthys dentatus*, *Achirus fasciatus* and *Echeneis naucrates* were also taken at the same place.

Albacora thynnus (Linnæus).

A small example was secured at Sea Isle City on August 8 by Mr. W. J. Fox.

Trichiurus lepturus Linnæus.

Two early records for this species are one from "New Jersey" by Dr. Morris Beasley⁹ and another from Egg Harbor by Dr. S. Ashurst.¹⁰ Though I have not found either example in the collection of the Academy, there are a number of other New Jersey specimens.

Rachycentron canadus (Linnæus).

A small example was angled at Ocean City on September 13 and was secured by Mr. McCadden.

Coryphæna hippurus Linnæus.

Four small examples were secured by Mr. Frank Erricson in his pounds at Sea Isle City on August 27, and two of these were received at the Academy through Mr. W. J. Fox.

C. equiselis Linnæus.

This species is virtually recorded¹¹ from off Sandy Hook in 1875,

⁹ *Proc. Acad. Nat. Sci. Phila.*, 1842, p. 200, in donations to the museum.

¹⁰ *L. c.*, 1867, p. 246.

¹¹ *Lampugus punctulatus* in *Forest and Stream*, V, September 16, 1875, pp. 83 and 85.

though several writers have since stated it has not been recorded from the United States coast. Not in the Academy.

Lobotes surinamensis (Bloch).

An example 23 inches long was taken at Sea Isle City in Mr. Frank Erricson's pounds on June 23, 1910, and received through Mr. W. J. Fox.

Balistes carolinensis Gmelin.

Mr. F. J. Keeley secured a large example in Great Egg Harbor Bay on September 18.

Pseudopleuronectes americanus (Walbaum).

I saw a number of examples taken at Corson's Inlet, on April 3, one of which was at least 16 inches long, which is quite large. Mr. D. McCadden secured 2 examples at Ocean City on September 3.

Astroscopus guttatus Abbott.

One was secured at Sea Isle City on June 8 and another on June 21, from Mr. Erricson's pounds, through Mr. W. J. Fox.

Urophycis regius (Walbaum).

Mr. Fox secured 2 examples at Sea Isle City on April 24.

On November 2, 1909, Mr. B. W. Griffiths and the writer secured some interesting fishes in the Maurice River basin near Elmer, such as *Notropis chalybaeus*, *Schilbeodes gyrinus*, *Esox reticulatus*, *Mesogonistius chactodon*, *Umbra pygmaea*, *Erimyzon sucetta oblongus* and a number of prawns.

On September 25, 1910, I visited Lake Hopatcong and secured the following in Hurd Cove, near the upper end of the lake: *Abramis crysoleucas*, *Catostomus commersonnii*, *Erimyzon sucetta oblongus*, *Ameiurus nebulosus*, *Schilbeodes gyrinus*, *Esox americanus*, *Umbra pygmaea*, *Pomoxis sparoides*, *Acantharchus pomotis*, *Enneacanthus gloriosus*, *Lepomis auritus*, *Eupomotis gibbosus*, *Micropterus dolomieu*, and *Stizostedion vitreum*. As some of these are distinctly lowland fishes, it is interesting to note them at such a high altitude.